Subject Index

Page numbers preceded by the letter S are articles that appear in the supplemental issue.

Volume 10, 1995

Acetabulum
reconstruction for metastatic tumor, 301
revision with antiprotrusio cage and bone allograft, 307
Adhesion molecules
in synovial fluid as mediators in loosened hip arthroplasties, 810
Animal studies
alterations after collared and collarless hip arthroplasty in dogs, 63
bone ingrowth into porous fiber-mesh implants, 245
carcinogenesis bioassays of intraarticular alloys in rats, 75
cerclage wiring of intraoperative femoral fractures, 823
indomethacin affecting fixation of porous-coated titanium implants, 351
pressurization affecting bone–cement interface strength in hip arthroplasty, 373
Antibiotic-loaded cement
bacterial growth on, 817
surface patterns and elution characteristics of, 453
use in United States, 470
Antiprotrusio cage and bone allograft
for acetabular revision, 307
Arthritis. *See also* Osteoarthritis
intracapsular hip pressure related to pain in, 632
of knee, posterolateral, 427
rheumatoid
Insall–Burstein knee prosthesis in, 217
and knee arthroplasty in young patients, 598
Arthrodesis
of hips, converted to arthroplasty, 529
radiohumeral, for failed elbow arthroplasty, 699
Avascular necrosis of hip
in renal transplant recipients, hemiarthroplasty in, 205

Bacterial growth
on antibiotic-loaded cement, 817
Bladder management
perioperative, in hip arthroplasty, 732
Blood transfusions
evaluation of blood salvage techniques, 532
and postoperative blood salvage in knee arthroplasty, 433
titanium contamination of Cell Saver blood in, 83
Bone
appositional bridging of gaps in acetabular components, 702
autogenous
banking for future revision arthroplasty, 109
grafts in simultaneous primary and revision hip arthroplasty, 103
ingrowth
in porous-coated femoral stems after cerclage wiring for fractures, 823
in porous fiber-mesh implants, disodium diphosphonate affecting, 245
in tibial trays, 157
in titanium fibermetal implants, 830
mineral density in distal femur after uncemented knee arthroplasty, 7
osteolysis. *See* Osteolysis
osteonecrosis in chronic renal failure, hip arthroplasty in, 191
Bone–cement interface
strength affected by cement pressurization, 373
tissue differentiation affected by mechanical factors, 514
Book reviews, 573
Breast milk
methyl methacylate in, after hip arthroplasty, 91
Burch–Schnieder antiprotrusion cage
in acetabular reconstruction, 307

Carcinogenesis bioassays of intraarticular alloys
in rats, 75
Catheterization
urinary, after hip arthroplasty, 732

Subject Index

Page numbers preceded by the letter S are articles that appear in the supplemental issue.

Volume 10, 1995

Acetabulum
reconstruction for metastatic tumor, 301
revision with antiprotrusio cage and bone allograft, 307
Adhesion molecules
in synovial fluid as mediators in loosened hip arthroplasties, 810
Animal studies
alterations after collared and collarless hip arthroplasty in dogs, 63
bone ingrowth into porous fiber-mesh implants, 245
carcinogenesis bioassays of intraarticular alloys in rats, 75
cerclage wiring of intraoperative femoral fractures, 823
indomethacin affecting fixation of porous-coated titanium implants, 351
pressurization affecting bone–cement interface strength in hip arthroplasty, 373
Antibiotic-loaded cement
bacterial growth on, 817
surface patterns and elution characteristics of, 453
use in United States, 470
Antiprotrusio cage and bone allograft
for acetabular revision, 307
Arthritis. *See also* Osteoarthritis
intracapsular hip pressure related to pain in, 632
of knee, posterolateral, 427
rheumatoid
Insall–Burstein knee prosthesis in, 217
and knee arthroplasty in young patients, 598
Arthrodesis
of hips, converted to arthroplasty, 529
radiohumeral, for failed elbow arthroplasty, 699
Avascular necrosis of hip
in renal transplant recipients, hemiarthroplasty in, 205

Bacterial growth
on antibiotic-loaded cement, 817
Bladder management
perioperative, in hip arthroplasty, 732
Blood transfusions
evaluation of blood salvage techniques, 532
and postoperative blood salvage in knee arthroplasty, 433
titanium contamination of Cell Saver blood in, 83
Bone
appositional bridging of gaps in acetabular components, 702
autogenous
banking for future revision arthroplasty, 109
grafts in simultaneous primary and revision hip arthroplasty, 103
ingrowth
in porous-coated femoral stems after cerclage wiring for fractures, 823
in porous fiber-mesh implants, disodium diphosphonate affecting, 245
in tibial trays, 157
in titanium fibermetal implants, 830
mineral density in distal femur after uncemented knee arthroplasty, 7
osteolysis. *See* Osteolysis
osteonecrosis in chronic renal failure, hip arthroplasty in, 191
Bone–cement interface
strength affected by cement pressurization, 373
tissue differentiation affected by mechanical factors, 514
Book reviews, 573
Breast milk
methyl methacylate in, after hip arthroplasty, 91
Burch–Schnieder antiprotrusion cage
in acetabular reconstruction, 307

Carcinogenesis bioassays of intraarticular alloys
in rats, 75
Catheterization
urinary, after hip arthroplasty, 732

Cell-Saver
compared to other blood salvage techniques, 532
Cement
antibiotic-loaded
bacterial growth on, 817
surface patterns and elution characteristics of, 453
use in United States, 470
methyl methacrylate in breast milk after hip arthroplasty, 91
pressurization
affecting bone–cement interface strength, 373
in femoral canal, factors affecting, 492
Cementless arthroplasty. *See* Hip arthroplasty, cementless; Knee arthroplasty, cementless
Ceramic femoral head components
failures of, 848, 851, 855, 860, 863
Charnley hip arthroplasty
dislocations after, surgical approach affecting, 609
long-term results of low-friction revision surgery, 121
Cobalt-chrome-molybdenum alloy
intraarticular, carcinogenesis bioassays in rats, 75
Cost reduction
in hip implant standardization program, 177
Cruciate ligament, posterior
management in knee arthroplasty, 560
neural system in osteoarthritis, 679
Cultures
intraoperative, in revision hip arthroplasty, 420
Cytokines
as mediators in loosened hip arthroplasties, 498, 810

Dislocation of hip
after bipolar hemiarthroplasty, 667
after Charnley arthroplasty, surgical approach affecting, 609
closed reduction of, 693
prediction with radiographs, 800
Disodium diphosphonate
affecting bone ingrowth into porous fiber-mesh implants, 245
Drain removal after arthroplasty
optimal timing of, 185
Dysplastic osteoarthritis
bipolar hip arthroplasty in, without bone–graft, 15

Editorial, 715
Elbow arthroplasty
failed, radiohumeral arthrodesis in, 699
loose-hinge, 670
Electromagnetic field stimulation
pulsed, to reverse osteolysis, 556

Femoral pulse
as guide to mechanical axis in knee arthroplasty, 780

Femur
distal, in knee arthroplasty
bone mineral density after uncemented arthroplasty, 7
intraoperative intercondylar fracture in, 643
fractures of. *See* Fractures, femoral
osteolysis after hip arthroplasty
in cementless arthroplasty, 257, 407
reversibility of, 556
osteotomy
derotational, with hip arthroplasty for complete congenital hip dislocation in adult, 313
oblique, in cementless hip arthroplasty, 319
proximal, extended, 329
perforation by ultrasonic tools, prevention of, 359
proximal, reconstruction after tumor resection, 293
Fractures
femoral
in allograft–prosthetic reconstruction of hip, 550
intercondylar distal, complicating knee arthroplasty, 643
intraoperative, cerclage wiring in, 823
in shaft, fixation with Mennen plate, 113
supracondylar, above knee arthroplasty, 37, 95, 213
stress, of proximal tibia, knee arthroplasty in, 707

Girdlestone resection arthroplasty of hip, 772

Health status
before and after joint arthroplasties, 177
Hemarthrosis recurrence
after knee arthroplasty, S52, S56
Hemiarthroplasty of hip
in avascular necrosis in renal transplant recipients, 205
dislocation after, 667
Hemophilia, HIV infection in
and knee arthroplasty, 448
and postoperative infection risk, 716
Hemovac drain
compared to other blood salvage techniques, 532
Hip, dislocations of. *See* Dislocation of hip
Hip arthroplasty
advocates of cemented or cementless femoral components, 401
all-polyethylene vs metal-backed cups in, S1
antibiotic-loaded cement in, 470
bacterial growth on, 817
appositional bone bridging of gaps in acetabular components in, 702
for arthrodesed hips, 529
bilateral
comparison of cemented and cementless procedures, 603
single-stage cementless, 151
bipolar
and dislocation after hemiarthroplasty, 667

Hip arthroplasty *(Continued)*
motion study of, 237
without bone–graft in dysplastic osteoarthritis, 15
blood salvage techniques in, 532
calculation of acetabular anteversion in, 369
and cellular mediators in pathogenesis of aseptic loosening, 498, 810
cemented femoral distal stem centralizer in, 683
cementless
accuracy of preoperative templating in, 507
acetabular reaming and contact in, S14
distal stem design and torsional stability in, 463
femoral osteolysis in, 257, 407
follow-up study of acetabular cup in, 460
oblique femoral osteotomy in, 319
single-stage bilateral, 151
Wisconsin femoral stem in, 622
Zweymuller femoral stem in, 793
ceramic femoral head components in, failures of, 848, 851, 855, 860, 863
Charnley
dislocations after, surgical approach affecting, 609
long-term results of low-friction revision surgery, 121
in chronic renal failure, 191
collared and collarless, in dogs, alterations after, 63
collarless femoral stems in, cemented or cementless, 592
in complete congenital hip dislocation in adult, 313
component failures in, 575
dislocation of, closed reduction for, 693
durability of cemented implants in, S29
factors affecting cement pressurization in femoral canal, 492
factors affecting femoral stem stability in, 839
hemiarthroplasty for avascular necrosis in renal transplant recipients, 205
iliopsoas tendinitis after, 546
implant standardization for, 177
improved cementing and fixation longevity in, 581
intraoperative femoral fractures in, cerclage wiring of, 823
ipsilateral knee arthroplasty with, and Mennen plate fixation of femoral shaft fractures, 113
in leukemia patients, 758
measurement accuracy in acetabular cup wear, 636
meta-analysis of threaded acetabular cups, 339
and methyl methacrylate levels in breast milk, 91
nerve palsy related to surgical approach in, 1
normalized and proportionalized cemented femoral stem designs in, S39
osteolysis of femur after
in cementless arthroplasty, 257, 407
reversibility of, 556
perioperative bladder management in, 732
and periprosthetic osteolysis in multiple myeloma, 397
pressurization affecting bone–cement interface strength, 373
quality of life after, 169. *See also* Patient outcomes
reactions around hydroxyapatite-coated prosthesis, 389
resection arthoplasty, 772
revision
acetabular revision with antiprotrusio cage and bone allograft, 307
banking of autogenous bone for, 109
and bone–graft for contralateral primary procedure, 103
and cytokines in interfacial membranes, 498
extended proximal femoral osteotomy in, 329
and femur fracture in allograft–prosthetic reconstruction, 550
and intraoperative complications with cementless femoral stems, S45
intraoperative cultures in, 420
long-term results of aseptic cemented Charnley procedures, 121
planning with acetabular models, 661
porous-coated prosthesis failure in, S22
thermal expansion modular femoral head extractor in, 476
ultrasonic tools in, 359
Streptococcus bovis infection of, 554
unusual cause of thigh pain after, 203
volume of cases related to short-term outcome, 133
HIV infection in hemophilia
knee arthroplasty in, 448
and postoperative infection risk, 716
Hydroxyapatite-coated hip prosthesis
reactions around, 389
Hydroxyapatite/tricalcium phosphate coating
of titanium fibermetal implants, 830

Iliopsoas tendinitis
after hip arthroplasty, 546
Indomethacin
affecting fixation of porous-coated titanium implants, 351
Infections
and antibiotic elution from bone cement, 453
and bacterial growth on antibiotic-loaded cement, 817
of hip arthroplasty, *Streptococcus bovis* in, 554
and intraoperative cultures in revision hip arthroplasty, 420
of knee arthroplasty
articulated PMMA spacer in, 87
diagnosis with polymerase chain reaction, 93
postoperative, risk in hemophiliacs with HIV infection, 716
resection arthroplasty of hip in, 772
and timing of wound drain removal, 185
urinary tract, and catheterization protocols in hip arthroplasty, 732
Insall–Burstein knee prosthesis
computer simulation of stability and range of motion, 383
in rheumatoid arthritis, 217

Interleukins
as mediators in loosened hip arthroplasties, 498, 810

Knee
arthroscopy of, postoperative blood salvage in, 433
flexion weight-bearing radiography in osteoarthritis, 790
Magnuson open-knee debridement in degenerative arthritis, 805
posterolateral arthritis, 427
Knee arthroplasty
accuracy of tibial intramedullary cutting guide in, 43
and analysis of tibial plateau anatomy, 47
antibiotic-loaded cement in, 470
bacterial growth on, 817
and bone ingrowth in tibial trays, 157
cementless
and bone mineral density of distal femur, 7
and micromotion in tibial components, 227
early patellofemoral revision after, 287
flexion space configuration in, 657
heterotopic ossification after, 413
symptomatic, 695
in HIV-infected hemophiliacs, 448
hybrid fixation modular tibial component in, 438
infected
articulated PMMA spacer in, 87
diagnosis with polymerase chain reaction, 93
Insall–Burstein prosthesis
in computer simulation of stability and range of motion, 383
in rheumatoid arthritis, 217
intercondylar distal femoral fracture in, 643
ipsilateral hip arthroplasty with, and Mennen plate fixation of femoral shaft fractures, 113
lateral skin flap numbness after, 13
mechanical axis in, femoral pulse as guide to, 780
medialization of patellar button in, 540
Oxford knee vs Marmor knee in, 722
patellar tendon repair after
allografts in, 271
new surgical technique in, 275
patellofemoral complications of, 197
patellofemoral contact pressures exceeding UHMWPE yield strength, 363
in patients less than 45 years of age, 598
popliteus tendon dysfunction after, 543
porous-coated
anatomic, follow-up study of, 29
tibial polyethylene failure in, 748
position of knee joint after, 53
posterior cruciate ligament management in, 560
in proximal tibial stress fractures, 707
quality of life after, 169. *See also* Patient outcomes
recurrent hemarthrosis after, S52, S56
revision surgery after tibial polyethylene failure, 748
rotational malposition of femoral component in, 265
supracondylar fractures after
intramedullary nails for, 37, 95
Rush rod fixation in, 213
thrombogenesis in, 523
tibial component position affecting patellar strain in, 651
tibiofemoral contact stresses in, 480
transepicondylar axis in, 785
unicompartmental
comparison of prostheses in, 722
early failure of femoral component in, 615
follow-up of Miller–Galante prosthesis in, 764
porous-coated, S8
volume of cases related to short-term outcome, 133

Letters to the Editor, 117, 255, 405, 571, 714
Leukemia
hip arthroplasty in, 758
Loading conditions
affecting femoral stem stability, 839

Magnuson open-knee debridement
in degenerative arthritis, 805
Marmor knee
compared to Oxford prosthesis, 722
Mennen plate fixation
of femoral shaft fractures, 113
Methyl methacrylate
in breast milk after hip arthroplasty, 91
Micromotion
in cementless tibial components, 227
Miller–Galante unicompartmental knee arthroplasty, 764
Motion studies
in bipolar femoral prostheses, 237
micromotion in cementless tibial components, 227
Muscle hernia
after hip arthroplasty, thigh pain from, 203
Myeloma
multiple, periprosthetic osteolysis in, 397

Nailing
intramedullary, in supracondylar femur fractures above kneearthroplasty, 37, 95
Nerve palsy in hip arthroplasty
related to surgical approach, 1
Neural system
of posterior cruciate ligament in osteoarthritis, 679

Ossification
heterotopic, after knee arthroplasty, 413
symptomatic, 695
Osteoarthritis
dysplastic, bipolar hip arthroplasty in, without bone–graft, 15

Osteoarthritis *(Continued)*
of knee
flexion weight-bearing radiographs of knee in, 790
Magnuson open-knee debridement in, 805
neural system of posterior cruciate ligament in, 679
unicompartmental arthroplasty in, porous-coated, S8
outcomes of arthroplasty in, 737
Osteolysis
femoral, after hip arthroplasty
in cementless arthroplasty, 257, 407
reversibility of, 556
periprosthetic, in multiple myeloma, 397
Osteonecrosis in chronic renal failure
hip arthroplasty in, 191
Outcomes of surgery. *See* Patient outcomes
Oxford knee
compared to Marmor prosthesis, 722

Patellar tendon repair after knee arthroplasty
allografts in, 271
new surgical technique in, 275
Patellofemoral joint
complications in knee arthroplasty, 197
contact pressures in, 363
early revision after knee arthroplasty, 287
Patient outcomes
after arthroplasty in osteoarthritis, 737
comparative studies of, 737
meta-analysis after uni- and bicompartmental knee arthroplasty, 141
prediction with SF-36 questionnaire, 742
and quality of life after joint arthroplasties, 169
related to surgical volume of cases, 133
Polyethylene
acetabular components compared to metal-backed cups, S1
failure in porous-coated knee arthroplasty, 748
ultrahigh-molecular-weight
patellofemoral contact pressures exceeding yield strength in, 363
wear rates affected by aging after irradiation, 689
wear in tibial component of unicompartmental knee arthroplasty, S8
Popliteus tendon
dysfunction after knee arthroplasty, 543
in rotational malposition of femoral component in knee arthroplasty, 265
Porous-coated implants
femoral
bone ingrowth after cerclage wiring for fractures, 823
failure in revision hip arthroplasty, S22
and stability in loading conditions, 839
knee
anatomic, follow-up study of, 29
tibial polyethylene failure in, 748
in unicompartmental arthroplasty, S8
tibial, bone ingrowth in, 157
titanium
fixation affected by indomethacin, 351
Wisconsin femoral stem, 622
Porous fiber-mesh titanium implants
disodium diphosphonate affecting bone ingrowth in, 245
Pressurization of cement
affecting bone–cement interface strength, 373
in femoral canal, factors affecting, 492
Prostaglandins
as mediators in loosened hip arthroplasties, 498, 810

Quality of life after joint arthroplasties, 169. *See also* Patient outcomes

Radiation
and aging affecting UHMWPE wear rates, 689
Radiography
in calculation of acetabular anteversion, 369
flexion weight-bearing studies of osteoarthritic knees, 790
in prediction of hip dislocations, 800
stereophotogrammetry analysis of acetabular cup wear, 636
Radiohumeral arthrodesis
for failed elbow arthroplasty, 699
Reimbursements
for primary and revision joint arthroplasties, 281
Renal failure
and avascular necrosis of hip in transplant recipients, 205
results of hip arthroplasty in, 191
Resection arthroplasty
of hip, 772
Revision surgery
for hip. *See* Hip arthroplasty, revision
for knee, after tibial polyethylene failure, 748
Rheumatoid arthritis
Insall–Burstein knee prosthesis in, 217
and knee arthroplasty in young patients, 598
Rush rod fixation
in supracondylar fractures after knee arthroplasty, 213

Skin flap numbness
after knee arthroplasty, 13
Solcotrans autotransfusion system, 433, 532
Standardization program
for hip implants, 177
Streptococcus bovis infection
of hip arthroplasty, 554
Surgeons
volume of cases related to short-term outcomes, 133
work input and risk in primary versus revision arthroplasty, 281
Synovial fluid inflammatory mediators
in loosened hip arthroplasties, 810

Templating of femoral components
preoperative, accuracy of, 507
Thigh pain after hip arthroplasty
unusual cause of, 203
Thrombogenesis
in knee arthroplasty, 523
Tibia
bone ingrowth in porous-coated components, 157
intramedullary cutting guide for knee arthroplasty, accuracy of, 43
proximal stress fractures of, knee arthroplasty in, 707
resection specimen analysis of proximal anatomy, 47
Titanium
bone ingrowth in fibermetal implants, 830
contamination of Cell Saver blood, 83
porous-coated implant fixation affected by indomethacin, 351
Titanium-aluminum-vanadium alloy
intraarticular, carcinogenesis bioassays in rats, 75
Transfusions
evaluation of blood salvage techniques, 532
and postoperative blood salvage in knee arthroplasty, 433
titanium contamination of Cell Saver blood in, 83
Tumor resection
and acetabular reconstruction for metastatic lesions, 301
reconstruction of proximal femur after, 293

Ultrasonic tools
in joint revision surgery, 359
Unicompartmental arthroplasty. *See* Knee arthroplasty, unicompartmental
Urinary tract infections
and catheterization protocols in hip arthroplasty, 732

Wisconsin noncemented femoral stem, 622

Zweymuller femoral stem
in cementless hip arthroplasty, 793

Author Index

Volume 10, 1995

Abbott, Bruce D., 785
Abril, J. C., 275
Aglietti, Paolo, 217, 679
Akin, John E., 839
Albohm, Marjorie J., 737
Allan, D. Gordon, 301
Alvarez, L., 275
Amstutz, Harlan C., 1, S29
An, K. N., 670
Arntorp, Jennifer, 453
Aro, Seppo, 169
Atwater, Richard D., 748
Austin, Kenneth S., 695
Ayers, David C., 615

Balderston, Richard A., 433
Ballard, W. Timothy, 772
Barden, Regina M., 764
Bargar, William L., 661
Barnes, C. Lowry, 543, 668
Barrack, Robert L., 281, 351, 573
Barrera, D. L., 373
Bauer, Thomas W., 592
Beauchamp, Christopher P., 53, 453, 817
Becker, Douglas A., 313
Bell, Robert S., 301
Belniak, Robert M., 75
Bergenudd, Hans, S8
Berry, Daniel J., 546, 668
Bicalho, Paulo S., 603
Biegler, Frances B., 839
Bjerkreim, Ingjald, 529
Black, Jonathan, 498
Bono, James V., 91
Booth, Robert E., Jr., 93, 433, 603
Borley, N. R., 13
Bradford, Michael S., 329
Bragdon, Charles, 823
Brand, Richard A., 772
Bromka, Joseph, 615
Brooks, Andrew T., 359
Brown, Treg D., S14, 351
Bugbee, W. D., 373
Buma, Pieter, 389
Buzzi, R., 217

Cabanela, Miguel E., 546
Callaghan, John J., S14, 401
Callahan, Christopher M., 141
Callaway, G. Hadley, 855
Campanacci, D., 293
Campbell, D. G., 287
Capanna, R., 293
Carpenter, Lawrence J., Jr., 281
Carter, Dennis R., 514
Carter, Larry W., 507
Cassidy, David, 369
Chan, K. L, 689
Chao, Wen, 532
Chau, C. C. H., 373
Checovich, Mary M., 622
Chillag, Kim J., 699
Chong, A., 203
Christie, Michael J., 598
Colwell, Clifford W., Jr., S56, 109, 732
Convery, F. R., 373
Cook, Stephen D., 351
Cooke, P. H., 554
Cracchiolo, Andrea, III, S29
Crawford, Mark, 95
Crook, D. W., 554
Crossett, Lawrence S., 716
Curtain, Michael, 307
Cutignola, L., 480

Dall, D. M., 257
Dalton, Jeanette, E., 351
Dalury, David F., 598
Daum, Wayne J., 800
Dave, D. J., 113
Davis, Aileen, 301
Davy, Dwight T., 651, 830
Dean, John C., 830
Delaney, Terence J., S22
Del Ben, M., 293
Delp, Scott, L., 383
Di Cesare, Paul E., S45
Diez-Vazquez, Vicente, 121
Dingwall, I. M., 707
Dittus, Robert S., 141
Doerr, Timothy E., 540
Dorey, Frederick J., 1, S29
Dorr, Lawrence D., 87, 256
Drake, Brenda G., 141
Drinkwater, C. J., 185
Duncan, Clive P., 53, 453, 817
Dust, William N. C., 369

Eberle, Robert W., 643
Eckhoff, Donald G., 540
Edwards, D., 13
Egan, Kevin J., S45
Elliott, Max L., S56
Emerton, M. E., 554
Eng, Kenneth O., 532, 603, 742
Evans, E. J., 43
Evans, P. D., 43
Ewald, Frederick C., 598

Fan, Gow-Fong, 29
Faris, Philip M., 213, 571, 737
Feller, Julian, 118
Finerman, Gerald A. M., S29
Fisher, J., 689
Flynn, William, 855
Frachie, Alessandro, 47

Franchi, Alessandro, 679
Frederick, Laurence D., 151
Fredin, Hans, 609
Freeman, M. A. R., 564
Freiberg, Andrew A., 271
Fuchs, Marc D., 191
Fujikawa, Yousuke, 15
Furia, John P., 413

Galante, Jorge O., 157, 420, 498, 764
Gantenberg, Julie B., 339
Garbus, Stanley, 470
Garcia-Cimbrelo, Eduardo, 121
Gardeniers, W. M., 389
Garvin, Kevin L., 191
Giori, Nicholas J., 514
Glant, Tibor T., 498
Go, G., 523
Goldberg, Victor M., 651, 830
Goldstock, Leonard, 191
Goodman, Stuart, 255, 722
Gorai, Patricia A., 748
Grady-Benson, John, 109, 823
Grevitt, Michael P., 205
Grobler, G. P., 257
Grothaus, Louis, 748
Gundersson, Ragnhild, 529
Gupta, Ranjan, 191
Gustilo, Ramon B., 313
Guzman, Jose F., 133

Haas, Steven B., 47, 191
Haertsch, P., 203
Hailey, J. L., 689
Hanson, Peter B., 683, 732
Harpel, P. C., 523
Harrigan, Timothy P., 839
Harrington, Ian J., 227
Harris, William H., 407, 581, 823
Hassan, Douglas M., 369
Hayes, Wilson C., 363
Healy, William L., 177, 197
Hearn, Susan L., 603
Hearn, Trevor C., 227
Heck, David A., 141, 470, 575
Hedlundh, Urban, 609
Heiner, John P., 63
Heiple, Kingsbury G., 651
Herndon, James H., 716
Hersh, Jeff, 91
Higgs, J. E. D., 203
Higuchi, F., 851
Ho, Wei-Pin, 29
Hoffman, Gregor J., 281
Hofmann, Otto E., 359
Hopfer, M., 75
Horne, Geoffrey, 118
Horne, J. G., 790
Horton, Greg A., 780
Hou, Fu J., 839
Hozack, William J., 433, 532, 603, 715, 742, 848
Hsu, Robert Wen-Wei, 29
Hummer, Charles D., III, 848
Huo, Michael H., S1, 319, 793
Hybbinette, Carl-Henrik, 609

Ilchmann, Thomas, 636
Ilstrup, Duane, 118
Inoue, A., 851
Insall, John N., 47
Iorio, Richard, 177
Itonaga, Ichiro, 237
Izumi, Hiroto, 15, 237

Jabczenski, Felix F., 95
Jacobs, Joshua J., 157, 498
Jaffe, William L., S39
James, S. E., 113
Jandera, V., 257
Jarolem, Kenneth L., S39
Jasty, Murali, 823
Jensen, Tim Toftgaard, 460
John, Joachim F., 661
Johnston, Geoffrey H. F., 369
Johnston-Jones, Karen, S29

Kamaric, Emir, 492
Katkin, Pamela D., S1
Kavanagh, Brian F., 118
Kay, Robert M., S29
Keating, E. Michael, 213, 571, 575, 737
Keggi, Kristaps J., 319, 793
Kendall, Richard W., 817
Kendrick, J. Barton, II, 463
Kessler, Craig M., 448
Khan, Amir M., 363
Kienapfel, Heino, 157
Kiewitt, Thomas, 470
Kim, Y. S., S14
Kindsfater, Kirk, S52
Kirven, Felix M., 177
Kitsugi, Toshiaki, 245
Knight, Jonathan L., 748
Knight, Joseph A., 75
Knutson, Kaj, 722
Kocmond, Jonathan H., 383
Kohles, Sean, 63
Koka, S. R., 113
Korinek, S., 670
Kraemer, William J., 227
Krikler, Stephen, 860

Lachiewicz, Paul F., 571
Langer, Frederick, 301
Lanzer, William L., 575
Laskin, Richard S., 657
Lathi, Vijay K., 363
Lauritzen, Jes Bruun, 7
Lavernia, Carlos J., 133
Learmonth, I. D., 257
Leicester, A., 203
Levine, Marc J., 93
Lewis, Courtland G., 75, 575
Lewis, Randall J., 448
Lewold, Stefan, 722
Lewonowski, Kris, 87
Li, Emile, 560
Lidgren, Lars, 722
Lieberman, Jay R., 191
Lombardi, Adolph V., Jr., 643
Lowry, Don A., 772
Lu, H. T. C., 339
Lund, Bjarne, 7

Magnus, Robert E., 329
Mallory, Thomas H., 402, 643
Maltry, John A., 492
Mancuso, Carol A., 91
Manley, Paul A., 63
Mariani, Brian A., 93
Markel, David C., S1
Markel, Mark D., 63
Marks, Richard A., 433
Marshall, P. D., 43
Martin, Richard P., 793
Mason, R. B., 790
Masri, Bassam A., 453
Masumi, Shogo, 15, 237
Matthews, Larry S., 271
Maynard, M. J., 523
McBeath, Andrew A., 622
McCarthy, Daniel S., 265
McDonnell, B., 43
McEldowney, Anthony J., 800
McGraw, R. W., 53
McGrory, Brian J., 758
McGuigan, Francis X., 742
McPherson, Edward J., 87
Meding, John B., 213, 571, 737
Michaud, R. J., 863
Mikhail, W. E. Michael, 592
Mintz, A. D., 287
Mishra, Nirmal K., 339
Mjöberg, Bengt, 636
Moilanen, T., 564
Moran, Michael C., 405, 550
Moriarty, Lisa, 742
Morrey, B. F., 670
Morris, H. G., 293
Munuera, Luis, 121
Murray, David G., 615
Murrell, George A. C., 37

Nagamine, Ryuji, 265
Nakamura Takashi, 245
Navarro, Ronald A., 1
Neil, Michael J., 185
Nelissen, Rob G. H. H., 592
Nelson, Carl L., 359
Nelson, Rebecca, 339
Nielson, Lone Schou, 460
Noble, Philip C., 463, 492
Nunley, James A., 37

Oates, K. M., 373
Oberlander, Michael, 197
O'Connor, Daniel O., 823
O'Driscoll, S., 670
Oishi, Calvin S., S56, 109, 732
Oka, Masanori, 245
Olsen, Claus, 7
Önnerfält, Rolf, 632
Önsten, Ingemar, 702

Paavolainen, Pekka, 169
Padgett, Douglas E., 91, 420
Paprosky, Wayne G., 329
Paris, Nancy J., 453
Parr, Jack, 830
Partridge, Cynthia M., 575
Patch, Douglas A., 177
Pedersen, D. R., S14
Pellegrini, Vincent D., Jr., 405, 413
Pellicci, Paul M., 191
Peters, Christopher L., 307
Petersen, Michael Mørk, 7
Petersen, Morten Boye, 460
Peyton, Randall S., 714
Pfeifer, Bernard A., 177
Phillips, H., 707
Pierson, Jeffery L., 581
Plowman, Marilyn C., 75
Pollard, J. Alan, 800
Presnal, Bradley P., 699

Ragni, Margaret V., 716
Ranawat, Chitranjan S., 523, 855
Rashad, S. Y., 863
Reckling, Frederick W., 780
Reikerås, Olav, 529
Reuben, Jeffrey D., 575, 839
Richards, J., 43
Riebel, Gregory D., 615
Ries, Michael D., 103
Rissanen, Pekka, 169
Ritter, Merrill A., 151, 213, 560, 571, 737
Robertsson, Otto, 632, 722
Robinson, Raymond P., 83, 476
Rollo, Vincent J., 532
Rosenberg, Aaron G., 420, 470 764
Rothman, Richard H., 433, 532, 603, 715, 742, 848
Rushton, N., 810
Ryd, Leif, 514

Sabokbar, A., 810
Sachjowicz, Fritz, 420
Salvati, Eduardo A., S1, 191
Samuelson, Kent M., 307
Scerpella, Patrick R., 622
Schatzker, Joseph, 860
Schink-Ascani, Mary, 470
Schmalzried, Thomas P., 1, 119
Schneider, John E., 732
Schuind, Frédéric, 670
Schutzer, Steven F., 823
Scott, Richard D., S52, 543, 598
Sculco, Thomas P., 523, 855
Sedel, Laurent, 255
Segoni, F., 217
Sekel, R., 203
Shanbhag, Arun S., 498
Sharrock, N. E., 523
Shaw, D., 689
Shaw, James A., 397, 438
Sheinkop, Mitchell B., 764
Shiba, N., 851
Siliski, John M., 695
Silverman, Andres, 420
Simonian, Peter T., 83, 476
Simpson, R. Bruce, 420
Singerman, Robert, 651
Sintonen, Harri, 169
Slätis, Pär, 169
Sledge, Clement B., 668
Smith, Evert, 407
Spencer, John D., 205
Steinberg, Gerald G., 556
Stern, Steven H., 383
Stevenson, Sharon, 830
Stevenson, T. M., 287
Stiehl, James B., 785
Stone, M., 689
Stovall, Don O., 507
Stubbs, Bruce T., 427
Sumner, Dale R., 157
Sunderman, F. William, Jr., 75
Surin, Valdemar, 117
Szivek, J. A., 480

Takei, Robert, 197
Takeuchi, Toshitsugu, 363
Talbert, Ronald E., 661
Taylor, Jeffery K., 661
Tejeiro, William V., 281
Thomas, Kevin A., 351
Tisdel, Chris L., 830
Tokgözoğlu, A. Mazhar, 405
Tomlinson, M. P. W., 707
Torisu, Takehiko, 15, 237
Trousdale, Robert T., 546, 758
Tuan, Rocky S., 93
Tucker, W. N., 373
Tullos, Hugh S., 463, 492
Turner, Thomas M., 157

Uchida, Tatsuo, 800
Unger, Anthony S., 448
Urban, Robert M., 157

Vaccaro, Alexander R., 433
Vallejo, J. C., 275
Vanderby, Ray, Jr., 63
Vaughn, Bradley K., 151
Villar, R. N., 13
Volz, R. G., 480
Vosburgh, Craig L., 693
Vosburgh, John B., 693
Voss, Frank, 764

Wakebe, I., 851
Walker, Richard H., 683, 732
Wasilewski, Stephen A., 197
Waterman, Robert A., 643
Watson, L. Glen, 369
Weidenhielm, Lars R. A., 592
Weiker, Garron G., 805
Werner, Frederick W., 615
Westrich, Geoffrey H., 47
White, Stephen E., 265
Whiteside, Leo A., 265
Wiedel, Jerome D., 103
Williams, Vincent J., 732
Wingstrand, Hans, 632, 636
Woolson, Steven T., S22

Yahiro, Martin A., 339
Yamamuro, Takao, 245
Young, Timothy R., 507
Younger, A. S. E., 53
Younger, Terry I., 329

Zaccherotti, Giovanni, 217, 679
Zanotti, Robert M., 271
Zatorski, Laurine E., 319, 793